

[METHOD OF FABRICATING A CONTACT]

Abstract

A method for fabricating a contact is provided. First, a substrate is provided. A patterned first material layer is formed over the substrate. The first material layer is fabricated using a conductive material. Thereafter, a treatment operation is performed to transform a portion of the first material layer into a second material layer with insulating properties. The second material layer is located on sidewall sections and a top section of the first material layer. A dielectric layer is formed over the second material layer and the substrate. A portion of the dielectric layer and the second material layer are removed to expose the first material layer. Because a treatment transformation is used to reduce the dimension of contacts, this invention eliminates the limitations associated with forming a contact through an etching process.